

DETAILED ACTION

1. This action is responsive to communications: amendment/request for reconsideration (hereinafter the Request) filed 12/5/2007, to the original application filed 12/14/2001, PCT date 6/14/2000, provisional filing date of **6/14/1999**. IDS filed 12/11/2001, 4/30/2002, and 3/22/2004.
2. Claims 1-23, 29, 31, 33-35 pending. Claims 11-12, 16-23, 29, 31, 35 remain withdrawn from consideration. Claims 1-10, 13-15, 33-34 remain selected for examination of the merits. Claims 1, 9, 13, 14, 33, 34 are independent claims.

Allowable Subject Matter

3. **Claims 1-8, 13, 15** are allowed.
4. **Claim 10** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. **The claimed invention (as claimed in claim 14) is directed to non-statutory subject matter.**

In regard to independent claim 14, claim 14 claims in pertinent part “*A system comprising*.”. There does not appear to be anything within said claim directing said claim to hardware, therefore, said claim can be interpreted as software per se (data structures), and is deemed non-statutory. It is noted that this claim is a means plus function type claim. Although Applicant describes the invention using

Art Unit: 2176

examples of hardware embodiments, nevertheless, page 18 lines 11-17 of Applicant's specification states *"any arrangement which is calculated to achieve the same purpose may be substituted for the specific embodiments shown"*. Said portion also states *"the invention can be implemented in an object oriented design, procedural, or any other design environment"*. The examiner interprets this as non-limiting and open-ended (especially with respect to a design environment), and therefore leaves open the possibility of an embodiment encompassing software per se. Applicant is encouraged to amend claim 14 directing limitation(s) of claim 14 to hardware.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wanderski et al. (hereinafter Wanderski), U.S. Patent No. 6,519,617 issued February 2003, in view of Hull et al. (hereinafter Hull), U.S. Patent No. 6,687,404 issued February 2004.

In regard to independent claim 9, Wanderski teaches creation of an XML "dialect" using dynamically selected transformations, comprising receiving a document (i.e. XML) and a DTD (Wanderski Abstract, column 4 lines 25-43). The XML document is parsed into a DOM tree of nodes which serves to map nodes to said XML document (Wanderski column 9 lines 9-12, column 7 lines 49-67). The DOM tree reflects a candidate path from node to node.

Wanderski alters (disambiguates) the DOM nodes accordingly (Wanderski column 11 lines 5-48). A new DTD is dynamically generated corresponding to the modified nodes of the DOM tree (Wanderski column 11 lines 59-67), therefore a new dialect of an XML document is created, so that when the new XML document is re-created, the new document is generated based upon instructions by the new DTD.

Wanderski teaches redundancy reduction and default attribute values comprising reducing redundant nodes of a DOM tree, as well as keeping count of the number of times a value occurs, so as to determine a “default” value (Wanderski column 13 lines 44-53, column 14 lines 4-11). Wanderski does not specifically teach selection based upon “scoring” of candidate paths. However, Hull teaches modeling of a document layout structure (Hull Abstract), comprising analysis of a grammar parse tree utilizing a scoring of nodes (Hull at least column 30 lines 10-20). It is noted that Hull teaches DTDs can be included within the document (tree) analysis (Hull column 56 lines 52-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hull to Wanderski, providing Wanderski the benefit of document recognition on any document in a class of documents modeled by a grammar (or DTD) (Hull Abstract – bottom).

In regard to independent claim 14, claim 14 reflects the system comprising computer readable instructions used for performing the methods as claimed in claim 1, and is rejected along the same rationale.

8. **Claim 33 is rejected under 35 U.S.C. 103(a)** as being unpatentable over Wanderski, in view of Yamakawa et al. (hereinafter Yamakawa), U.S. Patent No. 5,907,851 issued May 1999.

In regard to independent claim 33, Wanderski discloses transformation (using software) for converting an XML document with DTD into a new transformed document reflective of an XML dialect

(Wanderski column 4 lines 25-42). A plurality of DTDs are generated, as needed, so that a document (an output file) will conform to its new DTD accordingly (Wanderski column 11, lines 60-67). In this fashion, various documents are “disambiguated” via compliance with their respective (different) DTDs, changing all, or portions of documents as necessary.

Wanderski does not specifically teach providing a set of two or more DTDs, and selecting one for conversion. However, Yamakawa teaches document conversion utilizing preparation of a plurality of document type definitions (DTDs) for switching and development of one or more DTDs (Yamakawa column 22 lines 22-32, Figure 67). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Yamakawa to Wanderski, providing Wanderski the benefit of predefined DTD selection for eventual adherence to various established standards.

9. **Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wanderski, in view of Nakao (hereinafter Nakao), U.S. Patent No. 6,061,697 issued May 2000.**

In regard to independent claim 34, Wanderski discloses transformation (using software) for converting an XML document with DTD into a new transformed document reflective of an XML dialect (Wanderski column 4 lines 25-42). A plurality of DTDs are generated, as needed, so that a document (an output file) will conform to its new DTD accordingly (Wanderski column 11, lines 60-67). In this fashion, various documents are “disambiguated” via compliance with their respective (different) DTDs.

Wanderski does not specifically teach a first and second portion, where only a first portion is disambiguated, however Nakao teaches partial editing of a document portion (editing, or disambiguating said portion) using a partial editing DTD, so that only a portion of a document is disambiguated (see Nakao at least Abstract, column 4 lines 25-33). The result is a new document with only certain portions disambiguated (Nakao at least column 5 lines 23-34). It would have been obvious to one of ordinary skill

in the art at the time of the invention to apply Nakao to Wanderski, providing Wanderski the benefit of increased efficiency during dynamic DTD generation (i.e. during collaboration editing).

Response to Arguments

10. Applicant's arguments with respect to instant claim 34 have been considered but are moot in view of the new ground(s) of rejection (page 13-14 of the Request).

Regarding Applicant's arguments directed to the rejection of claim 14 under 35 USC 101, the examiner respectfully disagrees. As stated above, although Applicant describes the invention using examples of hardware embodiments, nevertheless, page 18 lines 11-17 of Applicant's specification states *"any arrangement which is calculated to achieve the same purpose may be substituted for the specific embodiments shown"*. Said portion also states *"the invention can be implemented in an object oriented design, procedural, or any other design environment"*. The examiner interprets this as non-limiting and open-ended (especially with respect to a design environment), and therefore leaves open the possibility of an embodiment encompassing software per se. Applicant is encouraged to amend claim 14 directing limitation(s) of claim 14 to hardware (i.e. a display, etc.).

Applicant states that the instant claims have been amended to incorporate claim 10 into claim 9, and has canceled claim 10 (page 11 of the Request). However, the examiner does not see any amendment in the Official record.

Applicant argues on page 12 of the request that the proposed motivation (regarding claim 33) is not applicable to Wanderski. The examiner respectfully disagrees. Yamakawa teaches document conversion utilizing preparation of a plurality of document type definitions (DTDs) for switching and development of one or more DTDs. Applying this teaching to Wanderski provides Wanderski the benefit of either generating new DTDs or selecting from predefined DTDs for eventual adherence to various established standards.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Bashore whose telephone number is (571)272-4088. The examiner can normally be reached on 9:00 am - 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on (571) 272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William L. Bashore/
William L. Bashore
Primary Examiner
Tech Center 2100

February 16, 2008